

Market Analysis: Cancer Biomarkers

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Many of the inventions in drug development are propelled by new research methods and the growth of new therapeutic options, such as immune-related oncology drugs, personalized medicine, stem cells, and biologics. The long run of the Pharmaceutical Industry lies in overcoming obstructions to development through propels in information analytics. The pharmaceutical and [healthcare](#) industry is quickly coming to terms with advanced innovation. Healthcare industry rapidly raise like a pharma company can utilize different computerized showcasing stages for sharing instructive substance to assist their potential and existing clientele, like clarifying indications, causes, diagnosis, cure etc. for relevant diseases. [Cancer biomarkers](#) have gained significant importance in the drug-development process, and the market is an emerging segment. To gain an understanding of the market dynamics, market size and competitive landscape, a detailed analysis of cancer biomarker market and cancer profiling technologies and new developments is needed. Microarray technologies provide analysis of tens of thousands of molecules for a variety of assays, including drug binding, molecular interactions, enzyme activity and pathway identification. These microarrays, which include DNA microarrays, protein microarrays, tissue microarrays, low complexity microarrays and carbohydrate microarrays, are excellent tools for gene expression profiling, biomarker profiling and diagnostics. Targeted cancer therapies are drugs or other substances that block the growth and spread of cancer by interfering with specific molecules ("molecular targets") that are involved in the growth, progression, and spread of cancer. Targeted cancer therapies are sometimes called "molecularly [targeted drugs](#)," "molecularly targeted therapies," "precision medicines," or similar names.

Pharmaceutical and biotechnology researchers use microarrays to streamline drug target identification, selection, validation and predictive testing. Rapid growth in the clinical research and diagnostic devices markets holds great potential for applications of microarray technology, including basic research, clinical trials and

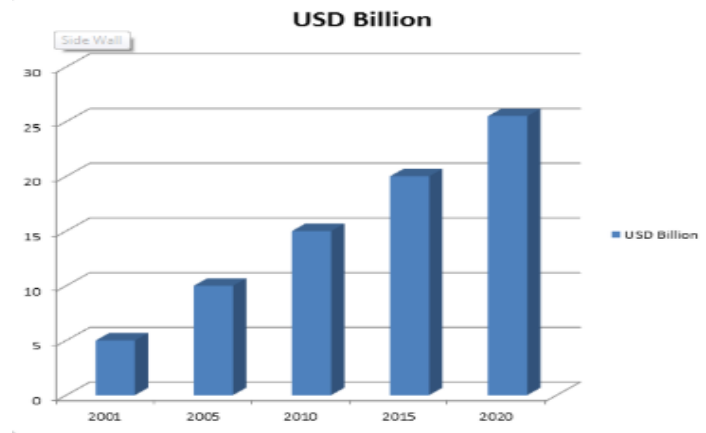
diagnostic devices. This report examines various microarray platforms and the technologies that are utilized to detect DNA and proteins for the purpose of drug discovery, disease diagnosis and disease monitoring. This report also examines companies that are actively developing and marketing microarray instrumentation or microarray biochips. The report categorizes the biomarkers and profiling market and provides market data, market drivers, trends and opportunities, top-selling products, key players and competitive outlook. This report will also provide market tables and also provides company profiles. Another vital trend providing a substantial push to breast cancer therapeutics market size is the advancements in healthcare infrastructure. Of late, the expanding healthcare business space is blazing with abundance of innovations by renowned giants who have been incessantly attempting to effectuate commercialization of innovative drugs that prove to be extensively beneficial for the consumers - a trend that is leaving a perpetual impact on the product matrix breast [cancer therapeutics](#) market. Another approach to identify potential targets is to determine whether cancer cells produce mutant (altered) proteins that drive cancer progression. For example, the cell growth signaling protein BRAF is present in an altered form (known as BRAF V600E) in many melanomas. Vemurafenib (Zelboraf®) targets this mutant form of the BRAF protein and is approved to treat patients with inoperable or metastatic melanoma that contains this altered BRAF protein.

Researchers also look for abnormalities in chromosomes that are present in cancer cells but not in normal cells. Sometimes these chromosome abnormalities result in the creation of a fusion gene (a gene that incorporates parts of two different genes) whose product, called a fusion protein, may drive cancer development. Such fusion proteins are potential targets for targeted cancer therapies. For example, imatinib mesylate (Gleevec®) targets the BCR-ABL fusion protein, which is made from pieces of two genes that get joined together in some leukemia cells and promotes the growth of leukemic cells.

As per a recent news snippet, scientists at Institute of Cancer Research, London, have come up with a breakthrough solution for breast cancer patients, which reportedly obliterated all signs of breast cancer in 11% patients within a span of 11 days. The drug was allegedly manufactured by blending two cancer drugs - lapatinib (Tyverb) and trastuzumab (Herceptin), and aided almost 17% of the patients with shrinking of tumors so significantly, that the patients didn't even require chemotherapy post the drug application.

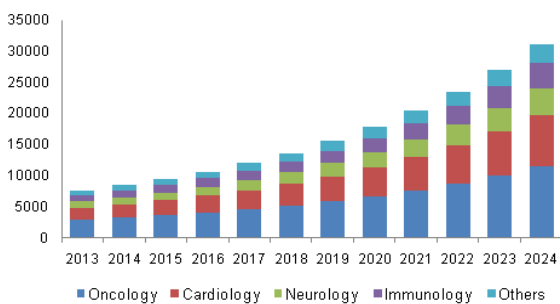
This report analyzes the cancer profiling and pathways market: technologies market, tools market, and application market (diagnosis, drug development and discovery). This report also examines recent studies, microRNA detection and profiling, clinically oriented microRNA profiling in several human cancers. The report covers epigenetic, methylation and miRNA products in development, products in clinical trials, currently marketed and clinical-stage development products. Relationship between miRNAs and epigenetics is also examined. This report categorizes the market for epigenetics, forecasting the market value in revenue by analyzing the current and future trends in research, diagnostics and therapeutics industries. This report also looks at SNPs analysis instruments, reagents, software and services, providing information critical to understanding the business behind this new technology.

the technological advancements in the field of CTC technologies. The possibility of this study is clinical testing, prognostic and monitoring markets for CTCs in cancer. The report incorporates the clinical portion, right now endorsed CTC tests and their markets, the administrative environment, current innovations, modern innovations, cancer rate, showcase projections and advertise share along with the latest trends and new developments in this area.



This report does not comprise the segment's research market involving reagents, or any accessories used for CTC isolation or studies. The information collected for the report is centered on breast, prostate and colorectal cancers for which clinical information and tests are accessible as of now on the advertise. CTCs in other cancers are being investigated and a few are in clinical trials; these are not included inside the scope of this report. The worldwide Cancer Biomarkers Showcase was esteemed at USD 10.19 billion in 2016 and is anticipated to reach USD 28.03 billion by 2025, developing at a CAGR of 11.9% from 2017 to 2025. Cancer Biomarkers have high usage in Cancer diagnostics and treatment, especially in Tissue specific therapies. Therefore, market of this genetically engineered product is seeing high values in terms of market value.

BIOMARKERS MARKET IS ESTIMATED TO BE VALUED AT USD 78.2 BILLION BY 2024



The investigate plan of the advertise incorporates various rivals with distinctive capabilities, creating and commercializing items such as CTC characterization reagents, CTC segregation gadgets and conventions, test and instrumented, and various identification technologies based on cell imaging. These market players include research-based companies that contribute considerably to